

National Compensation Survey

Technical Note

The National Compensation Survey (NCS) program provides information on the average hourly earnings for occupational groups and individual occupations for approximately 80 metropolitan areas and 70 nonmetropolitan counties. The survey covers establishments employing 50 workers or more in goods-producing industries (mining, construction and manufacturing); service-producing industries (transportation, communications, and public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services); and State and local governments. Agriculture, private households, and the Federal government are excluded from the survey.

Survey design

For each survey area, the first stage of sample selection employs a technique that uses a probability proportional to employment size to select the sample of establishments to be studied. That is, larger establishments, in terms of employment size, will have a greater chance of selection than smaller establishments. Weights are then applied to each establishment so that the data collected can represent units of similar industry and employment size, which were not selected for collection. The second stage of sample selection is a probability sample of occupations within a sampled establishment. As with the selection of establishments, the selection of jobs within an establishment is also through sampling using probability proportional to size. Jobs are then classified into occupations based on their duties. A selected job may fall into any one of about 480 occupational classifications. In the last step, the work level of each selected occupation is determined using a "generic leveling" process. Using identical criteria, generic leveling ranks and compares all occupations based on duties and responsibilities.

Presentation of data

The individual survey bulletins provide tabulations on the earnings of workers in a variety of occupational groups,

specific occupations, and a wide range of work levels. Also contained in the bulletins are information on the NCS program, a technical note describing survey procedures, and several appendixes with detailed information on occupational classifications and the generic leveling methodology. Earnings are defined as regular payments from the employer to the employee as compensation for straight-time hourly work, or for any salaried work performed. The following forms of payments are not considered part of straight-time earnings: shift differentials, premium pay for overtime, holidays, and weekends; bonuses not directly tied to production; uniform and tool allowances; free room and board; and payments, such as tips, made by third parties.

Metropolitan areas

All agencies that collect and publish data for metropolitan areas use the most recent definitions of metropolitan areas established by the Office of Management and Budget. A Metropolitan Statistical Area (MSA) is defined in terms of entire counties, except in the six New England States where they are defined in terms of cities and towns. If an area has a population greater than one million and meets certain other requirements specified in the *Federal Register*, it is termed a Consolidated Metropolitan Statistical Area (CMSA).

Additional information

For additional information regarding the NCS, please contact the Division of Compensation Data Analysis and Planning, 2 Massachusetts Ave. NE, Room 4175, Washington, DC 20212-0001.

Telephone: (202) 606-6220

Internet: <http://stats.bls.gov/comhome.htm>

TABLE C-1. Mean hourly earnings¹ for selected occupations, all workers, all industries, selected areas,² 1998

Occupation ³	Denver- Boulder- Greeley, CO	Detroit- Ann Arbor- Flint, MI	Philadelphia- Wilmington- Atlantic City, PA-NJ-DE-MD	San Francisco- Oakland- San Jose, CA
ALL	\$16.99	\$18.55	\$18.08	\$20.72
All excluding sales	17.12	18.69	18.25	21.06
WHITE COLLAR	19.58	21.89	21.59	24.51
White collar excluding sales	20.19	22.58	22.36	25.48
Professional specialty and technical	24.70	26.02	26.81	29.95
Professional specialty	26.27	28.23	29.18	31.70
Engineers, architects, and surveyors	29.63	29.10	28.59	33.44
Civil engineers	30.91	—	29.11	35.69
Electrical and electronic engineers	29.14	—	29.59	33.84
Industrial engineers	21.91	27.69	—	30.58
Mechanical engineers	30.00	27.48	28.58	30.64
Engineers, n.e.c.	30.98	30.39	26.88	33.35
Mathematical and computer scientists	27.27	26.00	33.07	35.94
Computer systems analysts and scientists	29.13	25.63	28.64	35.89
Operations and systems researchers and analysts	18.05	26.86	—	—
Natural scientists	34.93	20.15	32.57	29.19
Geologists and geodesists	36.23	—	—	—
Physical scientists, n.e.c.	—	—	—	29.54
Biological and life scientists	37.66	—	29.64	—
Health related	20.96	22.92	25.28	27.76
Physicians	—	29.08	41.93	26.82
Registered nurses	19.27	21.84	22.08	28.57
Pharmacists	27.02	27.74	25.85	—
Dietitians	—	15.73	—	18.89
Respiratory therapists	17.43	—	19.34	—
Physical therapists	—	26.84	25.28	—
Teachers, college and university	34.23	37.84	46.35	36.79
Psychology teachers	—	—	—	27.75
Engineering teachers	—	63.03	—	—
Medical science teachers	—	—	49.25	—
Health specialties teachers	—	32.82	—	—
Business, commerce and marketing teachers	—	—	—	36.89
Art, drama and music teachers	—	—	27.85	—
English teachers	—	—	—	36.75
Teachers, post secondary, subject not specified ..	—	46.76	27.01	—
Teachers, post secondary, n.e.c.	—	28.07	49.44	31.79
Teachers, except college and university	23.51	34.20	31.97	31.95
Prekindergarten and kindergarten	—	33.93	24.04	18.22
Elementary school teachers	25.95	35.18	34.99	34.45
Secondary school teachers	25.89	36.90	38.93	32.43
Teachers, special education	—	38.78	30.35	36.21
Teachers, n.e.c.	22.34	33.36	25.22	34.64
Substitute teachers	9.94	10.92	—	12.65
Vocational and educational counselors	17.60	21.52	25.11	25.01
Librarians, archivists, and curators	—	23.93	21.09	24.25
Librarians	—	23.93	21.09	24.25
Social scientists and urban planners	17.53	17.94	27.06	27.34
Economists	18.43	—	31.07	29.10
Psychologists	14.16	—	25.35	24.90
Social, recreation, and religious workers	15.47	22.04	16.81	19.37
Social workers	16.25	22.23	16.79	22.18
Recreation workers	13.36	—	—	—
Lawyers and judges	43.89	45.80	33.34	46.70
Lawyers	—	45.64	33.34	46.70
Writers, authors, entertainers, athletes, and professionals, n.e.c.	25.80	30.97	21.56	27.03
Designers	—	—	—	26.07
Editors and reporters	27.53	—	18.09	—
Public relations specialists	19.47	—	23.47	—
Professional, n.e.c.	26.16	—	26.36	26.35
Technical	19.21	19.19	18.56	23.09

See footnotes at end of table.

TABLE C-1. **Mean hourly earnings¹ for selected occupations, all workers, all industries, selected areas,² 1998**—Continued

Occupation ³	Denver- Boulder- Greeley, CO	Detroit- Ann Arbor- Flint, MI	Philadelphia- Wilmington- Atlantic City, PA-NJ-DE-MD	San Francisco- Oakland- San Jose, CA
WHITE COLLAR—Continued				
Professional specialty and technical—Continued				
Technical—Continued				
Clinical laboratory technologists and technicians	\$18.46	\$15.50	\$14.61	\$22.58
Health record technologists and technicians	—	14.04	12.75	15.62
Radiological technicians	16.47	17.30	18.48	23.51
Licensed practical nurses	13.22	14.63	15.52	17.50
Health technologists and technicians, n.e.c.	10.87	12.97	14.51	17.94
Electrical and electronic technicians	18.29	20.21	20.77	20.75
Mechanical engineering technicians	—	22.19	—	—
Engineering technicians, n.e.c.	20.50	—	17.95	20.46
Drafters	21.58	21.28	20.71	28.34
Biological technicians	15.02	—	—	—
Chemical technicians	15.93	18.68	19.41	—
Science technicians, n.e.c.	—	—	16.76	—
Airplane pilots and navigators	—	—	—	121.54
Computer programmers	26.86	28.21	20.75	29.58
Legal assistants	—	—	16.27	20.25
Technical and related, n.e.c.	17.92	19.28	21.20	19.72
Executive, administrative, and managerial				
Executives, administrators, and managers	26.57	28.75	28.48	33.47
Administrators and officials, public administration	30.44	34.14	33.21	39.67
Financial managers	28.56	29.84	24.29	31.00
Personnel and labor relations managers	24.69	37.95	38.33	36.45
Purchasing managers	27.93	—	38.27	33.37
Managers, marketing, advertising and public relations	—	—	35.29	—
Administrators, education and related fields	27.98	40.38	34.74	41.16
Managers, medicine and health	33.35	36.90	36.82	33.80
Managers, food servicing and lodging establishments	—	28.20	32.28	33.91
Managers, service organizations, n.e.c.	—	—	22.99	—
Managers and administrators, n.e.c.	25.34	—	26.49	21.94
Management related	34.24	36.43	32.01	45.22
Accountants and auditors	20.64	23.26	21.49	25.37
Underwriters	19.45	21.37	18.91	23.99
Other financial officers	23.05	—	21.64	—
Management analysts	23.35	31.03	23.32	26.50
Personnel, training, and labor relations specialists	27.83	—	28.89	29.67
Purchasing agents and buyers, n.e.c.	19.26	24.07	24.21	30.49
Construction inspectors	23.94	26.76	18.21	26.37
Inspectors and compliance officers, except construction	—	21.35	—	27.62
Management related, n.e.c.	15.61	—	18.52	22.64
	20.37	24.08	19.49	23.74
Sales				
Supervisors, sales	15.68	16.28	15.98	15.42
Real estate sales	24.35	18.56	27.76	20.03
Securities and financial services sales	19.73	—	—	—
Advertising and related sales	—	—	—	16.55
Sales, other business services	—	21.17	16.21	26.35
Sales representatives, mining, manufacturing, and wholesale	16.24	21.23	18.08	15.00
Sales workers, motor vehicles and boats	20.87	23.84	28.80	31.19
Sales workers, apparel	—	25.76	16.69	—
Sales workers, furniture & home furnishings	—	—	—	9.89
Sales workers, other commodities	6.87	13.23	—	9.08
Sales counter clerks	—	10.98	12.06	10.28
Cashiers	—	8.51	7.53	—
Sales support, n.e.c.	8.89	8.06	9.80	10.59
	10.67	—	17.24	16.46

See footnotes at end of table.

TABLE C-1. Mean hourly earnings¹ for selected occupations, all workers, all industries, selected areas,² 1998—Continued

Occupation ³	Denver- Boulder- Greeley, CO	Detroit- Ann Arbor- Flint, MI	Philadelphia- Wilmington- Atlantic City, PA-NJ-DE-MD	San Francisco- Oakland- San Jose, CA
WHITE COLLAR—Continued				
Administrative support, including clerical	\$12.05	\$13.07	\$12.81	\$14.65
Supervisors, general office	15.73	18.08	19.47	19.98
Supervisors, computer equipment operators	—	—	17.49	—
Supervisors, financial records processing	17.24	18.34	13.54	23.62
Supervisors, distribution, scheduling, and adjusting clerks	—	—	—	19.05
Computer operators	15.75	15.95	14.12	18.20
Secretaries	13.69	14.43	14.49	17.06
Stenographers	—	13.16	13.74	19.51
Typists	11.93	9.71	12.26	14.23
Interviewers	11.08	10.21	8.90	—
Hotel clerks	—	—	9.49	10.11
Transportation ticket and reservation agents	—	—	—	14.25
Receptionists	9.28	9.19	10.60	10.66
Information clerks, n.e.c.	10.39	—	11.99	14.88
Correspondence clerks	11.48	—	—	—
Order clerks	11.38	12.16	14.01	13.52
Personnel clerks except payroll & timekeeping	11.52	14.01	—	18.46
Library clerks	10.61	10.99	10.92	13.95
File clerks	9.48	—	8.63	10.49
Records clerks, n.e.c.	11.98	10.82	12.55	13.07
Bookkeepers, accounting and auditing clerks	12.09	11.47	11.91	14.96
Payroll and timekeeping clerks	—	12.43	13.73	—
Billing clerks	—	10.92	11.87	15.06
Cost and rate clerks	12.52	—	—	—
Telephone operators	—	11.28	12.71	—
Mail clerks except postal service	—	—	9.93	—
Dispatchers	—	—	11.39	18.56
Production coordinators	14.08	19.28	15.01	15.72
Traffic, shipping and receiving clerks	10.13	11.99	11.34	14.31
Stock and inventory clerks	12.75	10.64	12.45	12.31
Expeditors	11.12	—	—	—
Material recording, scheduling, and distribution clerks, n.e.c.	10.16	14.25	8.53	16.76
Insurance adjusters, examiners, & investigators ..	14.23	13.63	16.31	15.99
Investigators and adjusters except insurance	12.73	13.88	13.52	14.17
Eligibility clerks, social welfare	—	—	—	18.00
Bill and account collectors	—	12.14	10.65	15.61
General office clerks	11.47	11.98	12.57	13.81
Bank tellers	—	9.81	—	9.52
Data entry keyers	8.92	8.59	9.47	12.34
Statistical clerks	—	—	14.23	—
Teachers' aides	8.18	10.80	9.52	11.99
Administrative support, n.e.c.	10.76	13.88	13.27	15.24
BLUE COLLAR	13.19	16.35	14.43	15.19
Precision production, craft, and repair	15.99	20.41	17.80	18.72
Supervisors, mechanics and repairers	20.25	22.22	17.90	24.55
Automobile mechanics	—	18.54	15.26	22.22
Bus, truck, and stationary engine mechanics	16.03	15.65	17.28	19.22
Heavy equipment mechanics	—	20.32	—	—
Industrial machinery repairers	17.85	20.28	18.04	20.91
Machinery maintenance	14.66	—	—	—
Electronic repairers, communications and industrial equipment	—	—	19.93	17.53
Heating, air conditioning, and refrigeration mechanics	—	—	20.38	—
Millwrights	—	22.77	—	—
Mechanics and repairers, n.e.c.	14.81	19.86	17.05	20.01
Supervisors, construction trades, n.e.c.	—	24.95	—	—

See footnotes at end of table.

TABLE C-1. Mean hourly earnings¹ for selected occupations, all workers, all industries, selected areas,² 1998—Continued

Occupation ³	Denver- Boulder- Greeley, CO	Detroit- Ann Arbor- Flint, MI	Philadelphia- Wilmington- Atlantic City, PA-NJ-DE-MD	San Francisco- Oakland- San Jose, CA
BLUE COLLAR—Continued				
Precision production, craft, and repair—Continued				
Carpenters	—	\$21.65	\$19.70	—
Electricians	\$19.23	23.14	18.38	\$23.87
Plumbers, pipefitters and steamfitters	—	23.65	21.42	—
Construction trades, n.e.c.	—	15.69	15.19	19.15
Supervisors, production	14.77	20.06	19.12	22.65
Tool and die makers	—	22.57	—	—
Tool and die maker apprentices	—	15.85	—	—
Machinists	16.99	20.38	—	21.78
Precision grinders, filers, and tool sharpeners	—	21.75	—	—
Patternmakers, layout workers, and cutters	—	24.30	—	—
Electrical and electronic equipment assemblers ..	9.91	—	10.97	10.07
Butchers and meat cutters	11.24	14.66	—	—
Inspectors, testers, and graders	16.73	19.88	18.14	15.18
Stationary engineers	—	19.36	16.73	24.68
Machine operators, assemblers, and inspectors	10.93	15.33	12.98	12.28
Lathe and turning machine operators	—	14.72	—	—
Punching and stamping press operators	—	16.04	—	—
Grinding, abrading, buffing, and polishing machine operators	—	11.90	16.69	—
Fabricating machine operators, n.e.c.	—	20.27	—	—
Printing press operators	16.59	—	14.64	—
Textile sewing machine operators	—	11.86	7.79	—
Laundering and dry cleaning machine operators ..	—	7.63	9.46	—
Packaging and filling machine operators	—	10.62	—	—
Mixing and blending machine operators	14.04	—	17.17	—
Miscellaneous machine operators, n.e.c.	10.31	12.35	14.35	12.17
Welders and cutters	12.72	16.13	18.23	—
Assemblers	8.83	16.48	10.87	11.53
Production inspectors, checkers and examiners ..	11.73	15.18	13.76	11.20
Transportation and material moving	13.99	15.36	13.73	15.79
Truck drivers	15.09	14.44	13.87	15.63
Bus drivers	11.90	12.17	13.94	14.94
Taxicab drivers and chauffeurs	—	—	9.06	—
Parking lot attendants	—	—	7.56	—
Motor transportation, n.e.c.	6.35	—	10.69	—
Crane and tower operators	—	15.28	—	—
Excavating and loading machine operators	—	—	15.01	—
Industrial truck and tractor equipment operators ..	11.88	15.56	13.20	15.56
Miscellaneous material moving equipment operators, n.e.c.	14.79	—	—	—
Handlers, equipment cleaners, helpers, and laborers	10.38	10.57	11.55	10.85
Groundskeepers and gardeners except farm	12.45	12.90	12.09	15.74
Supervisors, handlers, equipment cleaners, and laborers, n.e.c.	—	—	16.93	—
Construction laborers	10.91	—	13.41	—
Production helpers	9.37	—	10.54	—
Stock handlers and baggers	8.94	9.32	10.22	9.27
Freight, stock, and material handlers, n.e.c.	12.59	11.19	13.27	13.07
Vehicle washers and equipment cleaners	9.39	10.30	12.98	6.64
Hand packers and packagers	9.21	9.70	9.65	7.83
Laborers except construction, n.e.c.	9.58	12.68	10.72	14.30
SERVICE	10.10	9.81	10.35	12.66
Protective service	19.81	13.27	15.55	16.96
Supervisors, police and detectives	—	—	22.86	—
Supervisors, guards	—	—	17.60	14.70

See footnotes at end of table.

TABLE C-1. Mean hourly earnings¹ for selected occupations, all workers, all industries, selected areas,² 1998—Continued

Occupation ³	Denver-Boulder-Greeley, CO	Detroit-Ann Arbor-Flint, MI	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD	San Francisco-Oakland-San Jose, CA
SERVICE—Continued				
Protective service—Continued				
Firefighting	—	\$15.96	—	\$22.49
Police and detectives, public service	\$22.33	19.01	\$19.24	27.92
Sheriffs, bailiffs, and other law enforcement officers	—	—	15.54	21.99
Correctional institution officers	—	15.65	17.51	20.58
Crossing guards	—	6.85	9.95	—
Guards and police except public service	12.82	7.28	9.91	8.85
Protective service, n.e.c.	—	14.87	8.48	—
Food service	7.03	6.84	7.02	8.73
Supervisors, food preparation and service	15.26	—	12.88	11.94
Bartenders	5.07	7.57	5.31	—
Waiters and waitresses	3.59	4.00	3.63	6.39
Cooks	8.30	9.00	9.80	13.72
Food counter, fountain, and related	—	5.72	7.01	—
Kitchen workers, food preparation	8.94	—	9.51	8.55
Waiters'/Waitresses' assistants	3.76	—	5.92	8.32
Food preparation, n.e.c.	6.40	6.36	7.81	7.57
Health service	9.19	8.71	9.98	11.69
Health aides, except nursing	9.34	10.48	10.07	14.08
Nursing aides, orderlies and attendants	8.96	8.28	9.95	10.84
Cleaning and building service	8.80	11.27	9.90	11.38
Supervisors, cleaning & building service workers	11.99	11.81	12.24	23.86
Maids and housemen	6.78	6.91	9.06	9.61
Janitors and cleaners	8.79	11.82	9.92	11.22
Personal service	9.29	8.20	10.04	12.58
Supervisors, personal service	—	—	20.73	—
Attendants, amusement and recreation facilities ..	—	—	6.61	8.70
Baggage porters and bellhops	—	—	—	8.03
Welfare service aides	—	—	10.24	6.52
Early childhood teachers' assistants	6.68	7.47	7.33	9.71
Child care workers, n.e.c.	7.09	9.34	8.46	12.96
Service, n.e.c.	8.57	8.51	9.75	10.54

¹ Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, hazard pay, deferred income payments, and deadhead pay. Excluded are shift differentials, premium pay for overtime, vacations, and holidays, non-production bonuses, uniform and tool allowances, room and board, third party payments, on-call pay, and tips. The mean is computed by totaling the pay of all workers weighted by hours and dividing by the number of workers.

² The average payroll month for Denver-Boulder-Greeley, CO, was May 1998; Detroit-Ann Arbor-Flint, MI, was March 1998; Philadelphia-

Wilmington-Atlantic City, PA-NJ-DE-MD, was February 1998; and San Francisco-Oakland-San Jose, CA, was June 1998.

³ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately. n.e.c. means "not elsewhere classified."

TABLE C-2. Mean hourly earnings¹ by occupational group and level,² all workers, selected areas,³ 1998

Occupational group ⁴ and level	Denver- Boulder- Greeley, CO	Detroit- Ann Arbor- Flint, MI	Philadelphia- Wilmington- Atlantic City, PA-NJ-DE-MD	San Francisco- Oakland- San Jose, CA
ALL	\$16.99	\$18.55	\$18.08	\$20.72
All excluding sales	17.12	18.69	18.25	21.06
WHITE COLLAR	19.58	21.89	21.59	24.51
Level 1	7.56	7.16	7.66	7.00
Level 2	8.74	9.42	9.08	9.59
Level 3	9.52	10.65	10.03	11.12
Level 4	11.23	12.97	12.27	13.57
Level 5	13.30	14.13	14.21	16.65
Level 6	14.71	18.29	16.36	19.15
Level 7	19.11	19.43	18.26	21.92
Level 8	21.08	22.95	22.55	23.54
Level 9	23.13	25.68	26.07	28.56
Level 10	25.29	26.17	28.58	30.10
Level 11	29.19	31.04	30.67	35.86
Level 12	35.04	35.24	34.51	40.37
Level 13	43.54	38.79	49.27	48.04
Level 14	50.01	45.91	65.37	65.66
Level 15	—	—	—	94.81
Not able to be leveled	32.82	32.29	31.29	25.58
White-collar excluding sales	20.19	22.58	22.36	25.48
Level 1	8.23	7.70	8.21	8.33
Level 2	9.25	9.88	9.55	9.91
Level 3	9.89	11.05	10.28	11.56
Level 4	11.18	12.73	12.32	13.96
Level 5	13.30	13.66	14.18	16.71
Level 6	14.75	18.54	16.29	19.37
Level 7	18.90	19.14	18.01	21.99
Level 8	20.11	23.27	22.45	23.47
Level 9	23.29	25.80	26.00	28.57
Level 10	24.80	26.12	28.83	29.99
Level 11	29.12	30.98	30.58	36.00
Level 12	34.10	35.25	34.51	40.35
Level 13	43.54	38.79	49.27	47.86
Level 14	50.01	45.91	62.59	65.66
Level 15	—	—	—	94.81
Not able to be leveled	31.74	32.50	30.70	25.80
Professional specialty and technical	24.70	26.02	26.81	29.95
Professional specialty	26.27	28.23	29.18	31.70
Level 5	13.75	11.29	13.29	20.05
Level 6	14.71	28.40	17.15	23.73
Level 7	20.68	19.88	18.49	27.21
Level 8	22.47	27.01	24.59	25.69
Level 9	24.13	27.02	27.63	30.05
Level 10	25.17	26.58	30.26	29.30
Level 11	28.23	31.28	31.21	35.79
Level 12	31.63	34.02	34.53	38.91
Level 13	40.09	29.45	52.02	46.59
Level 14	47.88	—	62.03	52.80
Not able to be leveled	33.48	29.35	26.30	26.89
Engineers, architects, and surveyors	29.63	29.10	28.59	33.44
Level 6	—	—	—	21.06
Level 7	—	—	—	25.01
Level 8	—	—	—	22.92
Level 9	24.76	24.75	25.00	29.41
Level 10	25.49	—	27.61	31.89
Level 11	—	29.70	31.46	35.35
Level 12	33.57	31.97	33.94	39.94
Level 13	39.10	—	—	42.13
Level 14	42.37	—	—	52.86
Mathematical and computer scientists	27.27	26.00	33.07	35.94
Level 7	—	—	23.93	27.76
Level 8	—	—	24.85	27.75
Level 9	26.07	23.93	26.85	33.55
Level 10	24.46	—	—	28.40
Level 11	29.14	29.49	33.71	38.40
Level 12	29.96	—	32.94	38.27
Level 13	36.32	—	—	48.62
Natural scientists	34.93	20.15	32.57	29.19
Level 12	—	—	32.90	—
Level 13	36.12	—	—	—
Health related	20.96	22.92	25.28	27.76
Level 6	—	17.40	17.03	—
Level 7	18.15	20.51	18.32	28.19
Level 8	18.65	21.21	21.17	25.36
Level 9	23.39	21.88	22.39	27.71
Level 10	—	25.38	19.33	26.09
Level 11	24.65	27.51	26.91	26.53
Level 13	—	—	64.58	—

See footnotes at end of table.

TABLE C-2. Mean hourly earnings¹ by occupational group and level,² all workers, selected areas,³ 1998—Continued

Occupational group ⁴ and level	Denver- Boulder- Greeley, CO	Detroit- Ann Arbor- Flint, MI	Philadelphia- Wilmington- Atlantic City, PA-NJ-DE-MD	San Francisco- Oakland- San Jose, CA
WHITE COLLAR—Continued				
Professional specialty and technical—Continued				
Professional specialty—Continued				
Health related—Continued				
Not able to be leveled	—	\$27.71	—	\$35.92
Teachers, college and university	\$34.23	37.84	\$46.35	36.79
Level 6	—	—	—	20.80
Level 7	—	—	—	21.90
Level 8	—	50.96	—	—
Level 9	24.30	38.41	28.31	30.57
Level 10	—	35.69	—	34.65
Level 11	25.71	36.15	33.67	49.77
Level 12	—	—	46.38	—
Level 13	—	—	47.56	48.68
Teachers, except college and university	23.51	34.20	31.97	31.95
Level 5	13.30	10.19	10.11	18.60
Level 6	11.51	39.16	19.81	31.48
Level 7	23.32	13.72	17.57	36.05
Level 8	26.67	36.45	32.37	27.71
Level 9	25.90	34.28	35.16	33.20
Level 10	—	—	—	35.43
Librarians, archivists, and curators	—	23.93	21.09	24.25
Social scientists and urban planners	17.53	17.94	27.06	27.34
Level 7	13.09	—	—	—
Level 9	—	—	25.37	—
Social, religious, and recreation workers	15.47	22.04	16.81	19.37
Level 7	17.56	—	16.52	—
Level 8	—	20.04	18.79	18.19
Level 9	21.43	19.47	17.15	22.30
Level 10	—	16.22	—	16.86
Level 11	—	35.41	—	20.05
Lawyers and judges	43.89	45.80	33.34	46.70
Level 12	—	—	—	44.62
Writers, authors, entertainers, athletes, and professionals, n.e.c.	25.80	30.97	21.56	27.03
Level 6	15.46	—	—	—
Level 7	—	—	19.08	—
Level 9	19.85	24.70	24.38	26.79
Level 11	38.19	—	—	—
Not able to be leveled	29.63	30.73	17.55	23.62
Technical	19.21	19.19	18.56	23.09
Level 3	10.87	9.57	10.91	10.88
Level 4	10.84	13.19	12.56	15.38
Level 5	12.76	13.19	14.38	17.81
Level 6	13.57	17.20	16.76	20.28
Level 7	18.00	20.26	18.77	19.42
Level 8	17.82	21.75	20.78	22.43
Level 9	22.03	23.40	22.99	29.92
Level 10	23.05	29.10	—	24.01
Level 11	35.91	—	—	46.30
Not able to be leveled	—	—	—	22.81
Executive, administrative, and managerial	26.57	28.75	28.48	33.47
Level 5	14.49	—	14.49	15.61
Level 6	15.67	16.98	15.22	18.92
Level 7	16.67	18.37	17.84	20.97
Level 8	17.70	—	19.49	21.17
Level 9	22.41	23.95	23.17	26.09
Level 10	25.34	24.94	26.40	31.88
Level 11	29.44	30.75	29.17	34.60
Level 12	36.83	36.59	34.60	41.79
Level 13	42.15	42.90	46.00	47.34
Level 14	59.81	50.23	63.40	69.82
Level 15	—	—	—	94.81
Not able to be leveled	45.32	48.30	45.21	36.61
Executives, administrators, and managers	30.44	34.14	33.21	39.67
Level 6	16.07	—	—	—
Level 7	18.54	15.77	19.22	22.27
Level 8	17.07	19.05	19.41	18.45
Level 9	23.13	25.25	23.46	26.32
Level 10	29.93	25.19	29.92	34.36
Level 11	30.37	30.97	30.25	36.04
Level 12	37.69	37.19	35.46	42.82
Level 13	44.62	42.90	46.07	47.50
Level 14	61.00	55.71	63.40	70.01
Level 15	—	—	—	94.81
Not able to be leveled	57.82	68.04	46.78	38.86
Management related	20.64	23.26	21.49	25.37

See footnotes at end of table.

TABLE C-2. Mean hourly earnings¹ by occupational group and level,² all workers, selected areas,³ 1998—Continued

Occupational group ⁴ and level	Denver- Boulder- Greeley, CO	Detroit- Ann Arbor- Flint, MI	Philadelphia- Wilmington- Atlantic City, PA-NJ-DE-MD	San Francisco- Oakland- San Jose, CA
WHITE COLLAR—Continued				
Executive, administrative, and managerial—Continued				
Management related—Continued				
Level 5	\$14.03	—	\$15.05	\$15.61
Level 6	14.96	\$16.41	14.81	19.39
Level 7	15.01	20.15	17.13	20.50
Level 8	18.53	—	19.55	22.55
Level 9	21.60	22.84	22.86	25.95
Level 10	22.06	24.78	20.30	25.40
Level 11	27.19	30.03	26.16	30.55
Level 12	—	34.78	30.31	36.72
Level 13	36.61	—	—	—
Not able to be leveled	21.25	—	—	34.93
Sales				
Level 1	15.68	16.28	15.98	15.42
Level 2	6.75	6.72	6.48	6.44
Level 3	—	8.17	6.32	7.61
Level 4	8.28	9.49	9.61	9.99
Level 5	11.47	14.57	12.01	11.64
Level 6	13.27	17.11	14.34	16.27
Level 7	14.26	—	17.51	16.39
Level 8	21.50	21.87	21.15	20.88
Level 9	26.50	19.64	23.90	24.27
Level 10	20.71	23.54	26.85	27.71
Level 11	28.19	—	—	—
Level 12	29.99	31.71	33.17	33.13
Level 13	49.87	—	—	40.93
Administrative support, including clerical				
Level 1	12.05	13.07	12.81	14.65
Level 2	8.23	7.70	8.21	8.33
Level 3	9.25	9.89	9.62	9.93
Level 4	9.87	11.11	10.26	11.62
Level 5	11.22	12.70	12.44	13.92
Level 6	13.11	14.17	14.23	16.49
Level 7	14.79	15.10	15.83	17.59
Level 8	16.72	17.23	17.09	19.59
Level 9	—	19.54	20.27	18.60
Level 10	21.38	—	—	—
Not able to be leveled	11.09	16.64	—	12.73
BLUE COLLAR				
Level 1	13.19	16.35	14.43	15.19
Level 2	7.77	8.54	8.52	7.93
Level 3	9.04	10.65	9.48	10.25
Level 4	10.35	16.75	11.98	11.48
Level 5	11.67	16.30	14.15	13.96
Level 6	12.66	15.40	16.10	16.46
Level 7	14.65	18.53	16.40	20.53
Level 8	17.93	21.36	19.06	21.14
Level 9	19.91	23.99	21.02	26.31
Level 10	21.23	27.12	22.47	26.84
Not able to be leveled	14.17	—	—	23.98
Precision production, craft, and repair				
Level 2	15.99	20.41	17.80	18.72
Level 3	8.15	—	8.88	9.83
Level 4	8.08	13.64	11.00	—
Level 5	9.73	14.53	11.93	14.51
Level 6	12.23	16.03	16.68	16.03
Level 7	15.20	18.81	16.72	21.45
Level 8	17.55	21.44	19.35	21.11
Level 9	20.16	23.69	21.02	26.45
Level 10	19.61	27.12	22.58	26.84
Machine operators, assemblers, and inspectors				
Level 1	10.93	15.33	12.98	12.28
Level 2	7.04	7.98	8.39	8.27
Level 3	8.01	9.95	9.75	8.00
Level 4	9.36	17.23	11.58	11.83
Level 5	10.54	16.89	14.83	12.90
Level 6	12.89	15.44	14.28	14.89
Level 7	14.01	—	17.13	14.39
Level 8	16.91	17.94	17.92	—
Transportation and material moving				
Level 1	13.99	15.36	13.73	15.79
Level 2	—	9.05	6.71	—
Level 3	9.98	11.70	8.04	11.34
Level 4	10.04	16.03	12.52	14.47
Level 5	13.47	16.86	14.90	14.53
Level 6	12.85	15.63	16.69	18.39
Level 7	14.59	—	—	24.80

See footnotes at end of table.

TABLE C-2. Mean hourly earnings¹ by occupational group and level,² all workers, selected areas,³ 1998—Continued

Occupational group ⁴ and level	Denver- Boulder- Greeley, CO	Detroit- Ann Arbor- Flint, MI	Philadelphia- Wilmington- Atlantic City, PA-NJ-DE-MD	San Francisco- Oakland- San Jose, CA
BLUE COLLAR—Continued				
Transportation and material moving—Continued				
Level 7	\$19.75	—	—	\$22.60
Handlers, equipment cleaners, helpers, and laborers	10.38	\$10.57	\$11.55	10.85
Level 1	8.27	8.71	8.75	7.36
Level 2	9.20	10.63	10.53	10.40
Level 3	11.72	13.84	12.45	12.03
Level 4	11.47	12.53	13.43	13.64
Level 5	13.42	—	15.75	16.19
Level 6	14.28	—	16.76	—
Level 7	—	—	17.18	—
SERVICE	10.10	9.81	10.35	12.66
Level 1	6.51	7.44	7.32	7.23
Level 2	7.11	8.96	7.77	8.99
Level 3	8.27	8.10	7.94	10.78
Level 4	9.90	9.11	10.74	13.19
Level 5	11.96	12.50	12.30	17.31
Level 6	14.64	14.33	16.06	20.61
Level 7	17.50	16.96	18.10	22.42
Level 8	—	18.35	19.77	23.71
Level 9	23.22	21.45	23.02	23.20
Protective service	19.81	13.27	15.55	16.96
Level 1	—	—	7.25	—
Level 2	—	9.78	9.20	8.29
Level 3	—	6.70	8.64	—
Level 4	—	—	12.98	17.45
Level 5	13.67	12.53	13.17	18.11
Level 6	—	16.33	17.36	25.81
Level 7	19.18	17.60	19.32	24.41
Level 8	—	18.34	18.95	27.81
Level 9	—	21.45	23.13	27.19
Food service	7.03	6.84	7.02	8.73
Level 1	5.23	6.16	5.97	6.53
Level 2	5.57	6.12	6.01	7.94
Level 3	6.00	7.21	6.08	8.49
Level 4	9.01	8.36	9.76	10.40
Level 5	—	—	11.70	11.44
Health service	9.19	8.71	9.98	11.69
Level 1	—	—	7.61	—
Level 2	8.64	8.38	8.61	9.03
Level 3	9.36	8.38	9.22	11.05
Level 4	10.03	10.23	9.77	13.06
Level 5	—	—	11.27	—
Level 6	—	—	13.90	—
Cleaning and building service	8.80	11.27	9.90	11.38
Level 1	7.79	9.45	9.30	7.69
Level 2	7.93	12.14	9.77	10.23
Level 3	10.04	13.28	9.88	14.39
Level 4	—	11.38	10.63	11.27
Level 5	10.92	—	12.08	—
Personal service	9.29	8.20	10.04	12.58
Level 1	5.48	6.67	7.25	7.07
Level 2	—	7.96	6.56	8.34
Level 3	8.29	7.53	7.34	10.00
Level 4	11.66	8.87	11.67	13.35
Level 5	—	—	11.17	—
Level 6	15.95	—	13.59	—
Level 7	—	—	17.14	—
Level 8	—	—	21.82	—

¹ Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, hazard pay, deferred income payments, and deadhead pay. Excluded are shift differentials, premium pay for overtime, vacations, and holidays, non-production bonuses, uniform and tool allowances, room and board, third party payments, on-call pay, and tips. The mean is computed by totaling the pay of all workers weighted by hours and dividing by the number of workers.

² Each occupation for which wage data are collected in an establishment is evaluated based on 10 factors, including knowledge, complexity, work environment, etc. Points are assigned based on the occupation's ranking within each factor. The points are summed to

determine the overall level of the occupation.

³ The average payroll month for Denver-Boulder-Greeley, CO, was May 1998; Detroit-Ann Arbor-Flint, MI, was March 1998; Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD, was February 1998; and San Francisco-Oakland-San Jose, CA, was June 1998.

⁴ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately. n.e.c. means "not elsewhere classified."